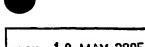
# PATE COOPERATION TREATY PCT



## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Artcle 36 and Rule 70)

REC'D	10	MAY	2005
WIPO			PCT

Applicant's or agent's file reference PCT-E3176	FOR FURTHER ACTION Franciscos (Form PCT/IDEA/A16)		nofTransmittalofInternationalPreliminary Report (Form PCT/IPEA/416)	
International application No. PCT/KR2003/002801	International filing date(day/mo	22.12.2003)	Priority date (day/month/year) 30 DECEMBER 2002 (30.12.2002)	
International Patent Classification (IPC)  IPC7 C01B 39/36	or national classification and IP	C .		
Applicant SK CORPORATION et al			·	
and is transmitted to the applicant the applicant and is transmitted to the applicant and applicant applicant and applicant applicant and applicant applicant and applicant applicant applicant and applicant applicant applicant applicant and applicant	of sheets, incl	uding this cover s s of the description	heet. on, claims and/or drawings which have been tions made before this Authority (see Rule	
These annexes consist of a total			·	
3. This report contains indications relating to the following items:  I Basis of the report  II Priority  III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability  IV Lack of unity of invention  V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement  VI Certain documents cited  VII Certain defects in the international application  VIII Certain observations on the international application				
Date of submission of the demand 25 JUNE 2004 (		ate of completion	of this report 2005 (12.04.2005)	
Name and mailing address of the IPI  Korean Intellectual Properties  920 Dunsan-dong, Seo- Republic of Korea  Facsimile No. 82-42-472-7140	perty Office gu, Daejeon 302-701,	Authorized officer  LEE, JONG  Telephone No. 82	коод	

I.	Bas	sis of the report				
1.	Wit	ith regard to the elements of the international application:*				
	$\boxtimes$	the international application as originally filed				
		the description:	, as originally filed			
İ		pagespages	, filed with the demand			
		pages, filed with the letter of				
		the claims:	, as originally filed			
		pages, as amended (together with a	ny statment) under Article 19			
		pages, filed with the letter of	, filed with the demand			
	Г	the drawings:	<del>-</del> -			
	_	pages	, as originally filed			
		pages filed with the letter of	, filed with the demand			
	Γ	the sequence listing part of the description:	•			
	_		, as originally filed , filed with the demand			
	٠,	pages				
2	2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.  These elements were available or furnished to this Authority in the following language which is  the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).  the language of publication of the international application (under Rule 48.3(b)).  the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).					
	<ol> <li>With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:         <ul> <li>contained in the international application in written form.</li> <li>filed together with the international application in computer readable form.</li> </ul> </li> </ol>					
	Ī	furnished subsequently to this Authority in written form.				
	Ī	furnished subsequently to this Authority in computer readable form	hanned the Merch of the			
	[	The statement that the subsequently furnished written sequence listing does not go international applicationas as filed has been furinshed.	beyond the disc losure in the			
	Į	The statement that the information recorded in computer readable form is identical to the been furnished.	ne written sequence listing has			
1.	4. [	The amendments have resulted in the cancellation of:				
	•	the description, pages				
		the claims, Nos.				
-	<b>-</b>	the drawings, sheets				
	5. 	This report has been established as if (some of) the amendments had not been made, si go beyond the disclosure as filed, as indicated in the Supplemental Box(Rule 70.2(c)).**	nce they have been considered to			
	i	Replacement sheets which have been furnished to the receiving Office in response to an invitation in this opinion as "originally filed." and are not annexed to this report since they do not contant 70.17).	n under Article 14 are referred to ain amendments (Rules 70.16			
	**.	Any replacement sheet containing such amendments must be referred to under item I and annex	ed to this report.			

$_{ m V.}$ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applical	oility;
citations and explanations supporting such statement	

1. Statement			
	Claima	1 - 20	YES
Novelty (N)	Claims		МО
Inventive step (IS)	Claims	1 - 20	YES
michael disp (25)	Claims		NO
Industrial applicability (IA)	Claims	1 - 20	YES
	Claims		No

2. Citations and explanations (Rule 70.7)

The following documents have been considered for the purpose of this opinion:

D1: Yongsheng Li et al, "Preparation for ZSM-5 membranes by a two-stage varying-temperature synthesis", 25, 459-466, Oct. 2001

D2: US 5,254,327(Intevep, S.A.) 19 Oct. 1993

#### (1) Novelty

The present invention relates to a manufacturing method of zeolite comprising two steps of forming a core and crystallizing, which has not been disclosed in the prior art in ISP. Thus the present invention is novel under PCT Article 33(2).

### (2) Inventive Step

D1 directed to the art of manufacturing ZSM-5 membrane by means of two-stage varying temperature synthesis is the same as the present invention in varying the temperature during synthesis, but D1 is different from the present invention in that present invention does not use an organic template.

Though D2 is the same as the present invention in synthesizing zeolite without using an organic template and a zeolite seed, there is no indication about secondary varying operation of a temperature, differently from the present invention.

Accordingly, the manufacturing method of ZSM-5 having 100% crystallization degree by varying the temperature using neither an organic template nor a zeolite seed is not taught or suggested in any of the cited prior art documents and not obvious to a person skilled in the art.

Thus, claims 1-20 of the present invention are inventive under PCT Article 33(3).

#### (3) Industrial Applicability

The subject matter of claims 1-20 is considered to be industrially applicable under PCT Article 33(4).